

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for treating a pulmonary disorder associated with depletion of the S-nitrosoglutathione pool in the lung or depletion of the glutathione pool in the lung or production of reactive oxygen species in the lung of a patient having such disorder which comprises delivering into the lungs of said patient as a gas, a therapeutically effective amount of an agent selected from the group consisting of: (a) compounds having an NO group and having a hypoxia relieving and smooth muscle constriction relieving effect with the said NO group being bound in said compound so it does not form NO₂, NO, N₂O₃, N₂O₄, OONO⁻ and OONO• and any products of their interaction with NO or NO₂; and (b) N₂O₃, which causes repletion or increase of the S-nitrosoglutathione pool in the lung or protects against toxicity where glutathione is depleted in the lung or where reactive oxygen species are increased in the lung and does so independently of reaction with oxygen, ~~with the proviso that said agent does not comprise H₂S.~~

2. (Original) The method of Claim 1 where the pulmonary disorder is associated with hypoxemia and/or smooth muscle constriction in the lungs and/or lung infection and/or lung injury.

3. (Original) The method of Claim 1 where the agent is naturally a gas.

4. (Currently amended) The method of Claim ~~3~~ 1 where the agent comprises NOX where X is halogen or hydrogen.

5. (Currently amended) The method of Claim 4 where the halogen is selected from the group consisting of chlorine and fluorine. ~~3 where the agent comprises N_2O_3 .~~

6. Cancelled.

7. (Original) The method of Claim 1 where N-acetylcysteine is also administered, the administration of the N-acetylcysteine being in an amount effective to mediate repletion or increase of the S-nitrosoglutathione pool or potentiate the effect of said agent, in the lung.

8. (Currently amended) The method of Claim 1 where ascorbate is also administered, the administration being of the ascorbate being in an amount effective to mediate repletion or increase of the S-nitrosolglutathione pool in the lung and/or protect the lung from injury.

9. (Original) The method of Claim 1 where liquid HNO is also administered, the administration of HNO being in an amount effective to mediate repletion or increase of S-nitrosoglutathione pool in the lung.

10. (Cancelled)

11. (Currently amended) The method of Claim 1 where the disorder is selected from the group consisting of pulmonary hypertension, primary pulmonary hypertension, secondary pulmonary hypertension, and persistent pulmonary hypertension of the newborn. ~~10 where the H_2S is administered after administration by inhalation of nitric oxide.~~

12. Cancelled.

13. (Currently amended) The method of Claim 1 where the disorder is pneumonia or

ventilation pneumonia 10 where the H_2S is administered at a dosage of 0.1 to 10 ppm in nitrogen.

14. (Cancelled)

15. (Currently amended) The method of Claim 14 1 where the disorder is selected from the group consisting of ~~pulmonary hypertension, including persistent pulmonary hypertension of the newborn, adult respiratory distress syndrome, pneumonia,~~ interstitial lung diseases, including pulmonary fibrosis, and cystic fibrosis.

16. (Currently amended) The method of Claim 1 where the disorder is asthma. ~~15 where the agent comprises H_2S .~~

17. (Currently amended) The method of Claim 1 where the disorder is adult respiratory distress syndrome. ~~the agent is selected from the group consisting of (a) compounds capable of being administered as a gas and having an NO group and having a hypoxia relieving and smooth muscle constriction relieving effect with the said NO group being bound in said compound so it does not form NO_2 , NO, N_2O_3 , N_2O_4 , $OONO^-$ and $OONO^\bullet$ and any products of their interaction with NO or NO_2 , and (b) N_2O_3 .~~

18. (Currently amended) The method of Claim 1 where the agent comprises HNO . ~~14 where the agent is selected from the group consisting of (a) compounds capable of being administered as a gas and having an NO group and having a hypoxia relieving and smooth muscle constriction relieving effect with the said NO group being bound in said compound so it does not form NO_2 , NO, N_2O_3 , N_2O_4 , $OONO^-$ and $OONO^\bullet$ and any products of their interaction with NO or NO_2 , (b) N_2O_3 , and H_2S .~~

19. (Currently amended) The method of Claim 1 where the agent comprises NOCl or NOCN. ~~16 where the H₂S is administered at a dosage of 0.1 to 100 ppm in nitrogen.~~

20. (Currently amended) The method of Claim 1 where the agent comprises a compound selected from the group consisting of methylnitrososulfinate, methylthionitrite, thionitroschloronitrite, and thionyldinitrite. ~~16 where the H₂S is administered at a dosage of 0.1 to 100 ppm in nitrogen.~~

21. (Currently amended) The method of Claim 1 where the agent comprises trifluoronitrosomethane or methylnitrite. ~~10, where the H₂S administration is stopped if bronchial obstruction is caused by the treatment.~~

22. (Currently amended) The method of claim 1 where the agent comprises ethylnitrite. ~~14 wherein the when H₂S is the agent, administration is stopped if bronchial obstruction is caused by the treatment.~~